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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,304

03/31/2004

Jeong-Ho Lee

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5202

32605

7590

10/30/2008

MACPHERSON KWOK CHEN & HEID LLP

2033 GATEWAY PLACE

SUITE 400

SAN JOSE, CA 95110

EXAMINER

NGUYEN, DUNG T

ART UNIT

PAPER NUMBER

2871

MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/813,304	LEE ET AL.	
	Examiner	Art Unit	
	Dung Nguyen	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,14-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 4-6 is/are allowed.
- 6) ☒ Claim(s) 14-17,19-21 and 233 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' amendment dated 07/11/2008 has been received and entered. By the amendment, claims 1, 4-6, 14-17 and 19-23 are pending in the application.

Applicant's arguments with respect to claim 14 have been considered but are moot in view of the new ground(s) of rejection as follow:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 14 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Takeda et al., US 7,224,421.

Claims 14 and 23 are anticipated by Takeda et al. figure 52 which discloses a liquid crystal display (LCD) device, in which a thin film transistor (TFT) array panel comprising:

- a substrate (17)
- a gate line (31)
- a gate insulating layer 40)
- a TFT having a semiconductive layer, source/drain electrode (according to an active matrix type LCD)
- a first passivation layer (protect layer 43);

a pixel electrode (13) having a cut-out (slip 21)
a protrusion (20C) disposed in the cut-out (21).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al., US 7,224,421, in view of Sasaki et al., US 6,038,006.

Regarding claims 15-17, Takeda et al. do not appear to explicitly specify what its auxiliary common electrode (15) overlaps. Sasaki et al. do disclose that a storage electrode (41) at least overlapping a pixel (see figure 2). Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Takeda et al. display in view of Sasaki et al. for high screen quality through controlling storage capacitance.

Regarding claims 21, Takeda et al. do not explicitly disclose a color filter. Sasaki et al. do disclose a color filter (33R/33G/33B) can be formed over the thin film transistor array panel (figure 6). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ the Takeda et al. device having a color filter formed over the thin film transistor array panel as shown by Sasaki et al. in order to obtain a color display characteristics.

5. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al., US 7,224,421, in view of Sasaki et al., US 6,038,006, and further in view of Nonaka et al., US 6,897,918 B1

Regarding claims 19 and 20, the modification to Takeda et al. do not appear to explicitly specify a spacer having a height larger than the protrusion and disposed on the same layer as the protrusion and that the protrusion and spacer comprise an organic material. Nonaka teaches a color filter and protrusion and teaches spacers, protrusions and a spacer made of the same material as the protrusion for controlling liquid crystal alignment (Column 3, Lines 30-40). It would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Takeda et al. in view of Nonaka for controlling liquid crystal alignment.

Allowable Subject Matter

6. Claims 1 and 4-6 are allowed.

7. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2871

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Monday-Thursday.

DN
10/27/2008

/Dung T. Nguyen/
Primary Examiner
Art Unit 2871